

WHAT IS CLAIMED IS:

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1. A color cathode ray tube comprising:
a mask frame;
a shadow mask fixed to the mask frame;
an inner magnetic shield supported by the mask frame; and
an electron shield provided in the mask frame;
wherein at least a part of the electron shield has a smaller
anhysteretic magnetic permeability than the shadow mask, the mask frame
10 and the inner magnetic shield when an applied magnetic field is 800 A/m (10
Oe).
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2. The color cathode ray tube according to claim 1, wherein the electron
shield is formed so as to elongate a front end portion on an electron beam
side of the mask frame.
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3. The color cathode ray tube according to claim 1, wherein the electron
shield is formed of a member different from the mask frame so as to protrude
beyond a front end portion on an electron beam side of the mask frame.
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4. The color cathode ray tube according to claim 1, wherein a part of the
electron shield has a region having a smaller anhysteretic magnetic
permeability than another part when the applied magnetic field is 800 A/m
(10 Oe).
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5. A color cathode ray tube comprising:
a mask frame;
a shadow mask fixed to the mask frame;
an inner magnetic shield supported by the mask frame; and
an electron shield provided in the mask frame;
wherein at least a part of the electron shield has a smaller
anhysteretic magnetic permeability than the shadow mask, the mask frame
and the inner magnetic shield when an applied magnetic field is 800 A/m (10
Oe), and
35 the mask frame comprises a L-shaped member having a L-shaped
cross-section and a reinforcing member connected with the L-shaped

member, and a part of the reinforcing member has a region having a smaller anhysteretic magnetic permeability than another part when the applied magnetic field is 800 A/m (10 Oe).

- 5 6. A color cathode ray tube comprising:
a mask frame;
a shadow mask fixed to the mask frame;
an inner magnetic shield supported by the mask frame; and
an electron shield provided in the mask frame;
- 10 wherein at least a part of the electron shield has a smaller anhysteretic magnetic permeability than the shadow mask, the mask frame and the inner magnetic shield when an applied magnetic field is 800 A/m (10 Oe), and
- 15 when an electron beam scans a phosphor screen at 100 %, a minimum distance between the electron shield and a path of the electron beam is at least 8 mm.